CLAIMS

1.   An automatic programming method for selecting workpiece data from a workpiece database in which a material, a shape, and a dimension of a workpiece are
5   registered, creating a workpiece model based on the selected workpiece data, and creating a program for controlling a numerical control device by using the created workpiece model, the automatic programming method comprising:

10   selecting minimum workpiece data that includes a product shape from the workpiece database, by comparing dimension data of the workpiece data registered in the workpiece database with dimension data of a product model; and

15   creating a workpiece model based on the selected workpiece data.

2.   The automatic programming method according to claim 1, wherein

20   the selecting includes

        selecting workpiece data with a smallest diameter including the product shape from the workpiece database, and

        selecting, when there is a plurality of workpiece
25   data having the smallest diameter involving the product shape, workpiece data with a shortest length equal to or longer than a length of the product shape.

3.   The automatic programming method according to claim 1,
30   wherein

        the selecting includes

        displaying workpiece data registered in the workpiece database in a list, and

displaying minimum workpiece data selected from the displayed workpiece data in a highlighted manner.

4. The automatic programming method according to claim 1,
5   wherein
        the selecting includes
        displaying workpiece data that includes a product shape from the workpiece database in order from workpiece data having a least cutting amount in a list, and
10   displaying minimum workpiece data from among the displayed workpiece data in a highlighted manner.

5. A program that causes a computer to execute the method according to any one of claims 1 to 4.
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6. An automatic programming apparatus that selects workpiece data from a workpiece database in which a material, a shape, and a dimension of a workpiece are registered, creates a workpiece model based on the selected
20 workpiece data, and creates a program for controlling a numerical control device by using the created workpiece model, automatic programming apparatus comprising:
        a workpiece selecting unit that selects minimum workpiece data that includes a product shape from the
25 workpiece database, by comparing dimension data of the workpiece data registered in the workpiece database with dimension data of a product model; and
        a workpiece-model creating unit that creates a workpiece model based on the selected workpiece data.
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7. The automatic programming apparatus according to claim 6, wherein
        the workpiece selection unit selects workpiece data

with a smallest diameter including the product shape from the workpiece database, and when there is a plurality of workpiece data having the smallest diameter involving the product shape, workpiece data with a shortest length equal

5   to or longer than a length of the product shape.

8.   The automatic programming apparatus according to claim 6, wherein

     the workpiece selection unit displays workpiece data

10   registered in the workpiece database in a list, and displays minimum workpiece data selected from the displayed workpiece data in a highlighted manner.

9.   The automatic programming apparatus according to claim

15   6, wherein

     the workpiece selection unit displays workpiece data that includes a product shape from the workpiece database in order from workpiece data having a least cutting amount in a list, and displays minimum workpiece data from among

20   the displayed workpiece data in a highlighted manner.